

ABSTRACT

A computer algorithm is encapsulated in at least two modules: at least one communication operation of the computer algorithm is encapsulated in a communication module, separately from the rest of the operations of the algorithm which may be encapsulated in an algorithm module. The separately encapsulated communication operation is made available to the algorithm module during its execution. Modules for data objects encapsulating data communicated may also be provided. A framework may be provided to ensure compatibility between different modules, wherein a plurality of protocols are provided and each module implements a corresponding protocol. All environment-dependent communication operations may be separately encapsulated so that one of the communication module and the algorithm module may be modified without modifying the other.